

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333210-927

Luminaire Tested: **S125DIP-S850D365U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333210-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3641.4 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

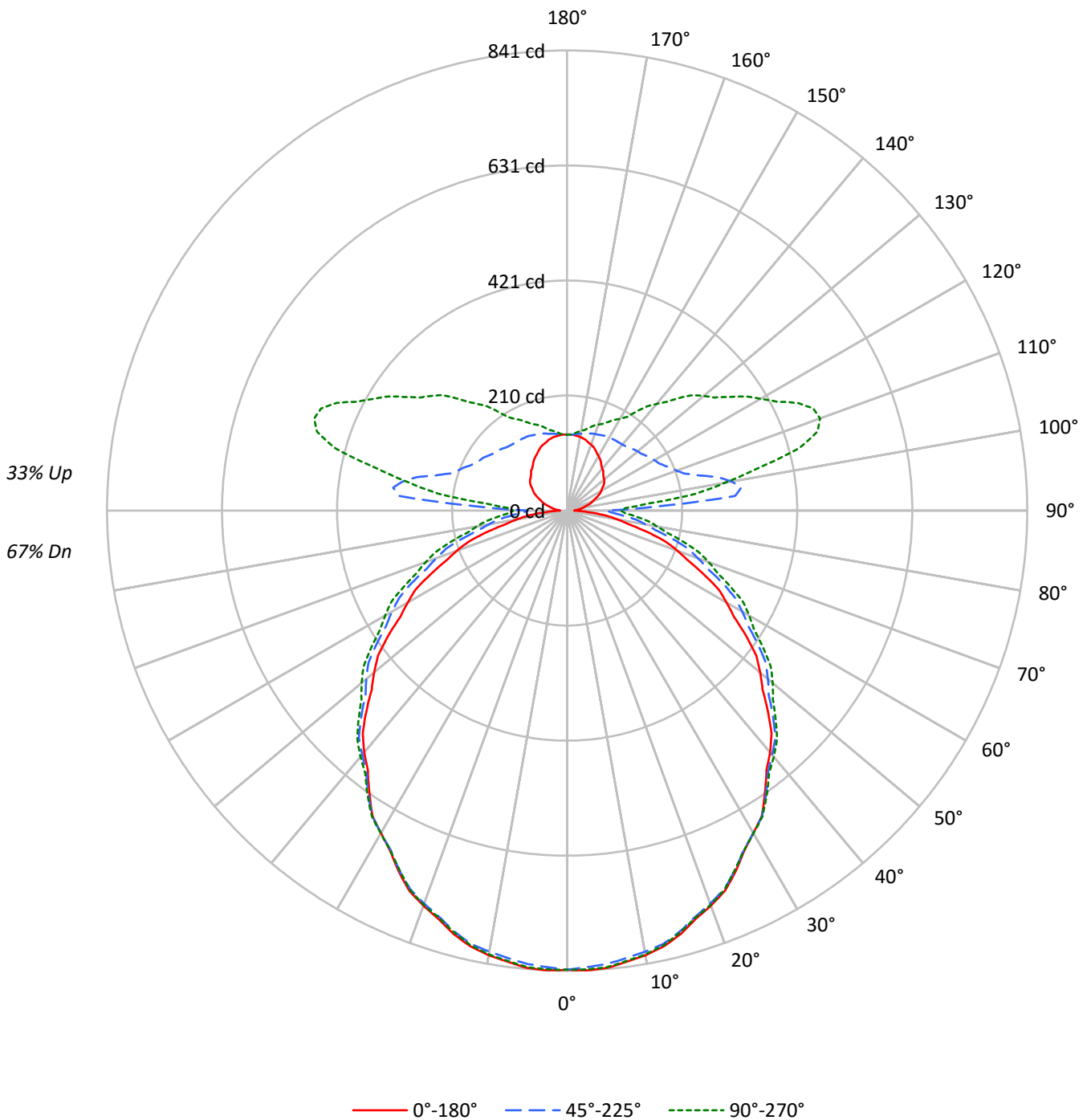
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	91	87	95	90	86	83	80	77	74	71	68	66	62	60	59	54
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	73	65	58	78	69	62	56	61	55	51	54	50	46	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	49	42	65	54	46	40	48	42	37	43	38	34	38	34	30	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	29	34	30	27	24
7	59	46	38	32	56	44	36	31	40	33	28	35	30	26	31	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	32	27	23	29	24	21	19
9	51	39	31	25	48	37	29	24	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	20	28	22	19	25	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	2.2
10°-20°	225.3	6.2
20°-30°	335.0	9.2
30°-40°	396.8	10.9
40°-50°	410.3	11.3
50°-60°	377.9	10.4
60°-70°	305.5	8.4
70°-80°	204.6	5.6
80°-90°	106.9	2.9
90°-100°	160.2	4.4
100°-110°	260.3	7.1
110°-120°	232.5	6.4
120°-130°	181.3	5.0
130°-140°	139.4	3.8
140°-150°	101.1	2.8
150°-160°	70.2	1.9
160°-170°	41.4	1.1
170°-180°	13.5	0.4
0°-30°	639.6	17.6
0°-40°	1036.4	28.5
0°-60°	1824.7	50.1
0°-90°	2441.7	67.1
90°-120°	652.9	17.9
90°-150°	1074.7	29.5
90°-180°	1200.0	33.0
0°-180°	3641.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	42	72	92	98	9
95°	20	60	308	190	150	18
105°	39	65	248	461	438	41
115°	62	80	195	398	465	61
125°	82	95	175	311	362	72
135°	94	112	162	251	292	73
145°	108	123	156	198	221	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.7	31.6	37.6	43.6	49.5	55.7	61.9	68.3	74.5	80.9	85.2
90°	13.5	19.6	26.0	32.4	38.8	45.4	51.9	58.7	65.2	71.9	76.4
92.5°	15.3	21.4	29.2	38.0	48.2	62.3	84.0	116.0	150.2	155.1	142.0
95°	20.0	25.0	31.9	39.8	50.7	68.8	105.0	172.8	256.3	308.1	306.8
97.5°	25.0	29.6	35.5	42.9	52.7	66.9	92.7	143.9	230.7	320.8	366.9
100°	28.7	33.0	38.0	44.9	54.1	67.3	89.4	131.7	208.0	305.5	379.3
102.5°	32.7	36.6	41.0	47.8	56.3	69.1	89.2	125.5	190.8	281.5	367.1
105°	39.1	42.0	46.3	52.0	59.4	71.5	89.3	119.7	171.9	248.2	332.2
107.5°	45.2	48.2	52.1	56.9	64.0	74.9	92.1	118.7	162.2	224.7	297.5
110°	49.7	52.4	55.8	60.5	66.9	77.8	94.4	118.8	157.9	212.8	277.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	54.9	57.2	59.8	64.1	70.0	80.5	96.5	119.6	155.3	204.8	261.6
115°	61.5	63.3	65.4	69.2	74.7	84.8	99.9	120.9	152.5	195.0	243.4
117.5°	67.4	69.1	70.8	74.1	79.8	89.2	103.5	122.8	150.6	188.2	230.8
120°	71.9	73.3	74.9	78.0	83.3	92.7	106.7	124.3	150.1	184.3	223.5
122.5°	75.9	76.8	78.0	80.7	86.2	95.3	109.2	126.0	149.2	180.5	216.7
125°	81.7	82.1	83.3	85.6	90.8	99.7	112.6	128.3	148.2	175.2	207.2
127.5°	85.5	86.2	87.8	90.8	96.3	105.0	116.8	130.9	148.1	170.7	198.1
130°	88.4	89.0	91.1	94.6	100.3	108.8	120.0	133.2	148.4	168.3	192.7
132.5°	90.0	91.0	93.7	97.8	103.8	112.0	122.7	134.7	148.3	165.6	187.4
135°	93.5	94.4	97.6	101.9	107.6	115.7	125.6	136.2	147.8	161.7	180.0
137.5°	97.9	98.6	101.6	105.9	111.5	119.5	128.1	137.5	148.1	159.1	174.0
140°	99.9	100.8	104.1	108.6	113.9	121.6	129.9	138.5	147.6	157.3	170.6
142.5°	103.1	103.5	106.5	110.8	115.8	122.9	130.6	138.6	147.1	156.2	167.8
145°	107.7	108.1	110.7	114.5	119.4	125.7	133.0	140.0	147.5	155.7	165.0
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.6
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	89.4	93.6	97.9	100.8	102.0	103.3	104.6	105.9
90°	80.9	85.4	89.9	93.2	94.4	95.8	97.3	98.5
92.5°	122.6	113.0	108.1	106.7	104.4	105.0	105.9	106.7
95°	269.4	230.8	200.4	179.6	161.0	153.8	152.9	149.7
97.5°	363.5	337.4	307.7	277.6	261.5	247.1	240.2	237.8
100°	404.7	394.8	369.8	343.2	325.0	305.9	296.6	293.3
102.5°	416.8	428.9	418.7	401.5	381.9	368.7	358.5	356.2
105°	403.1	445.1	461.1	460.5	452.8	444.8	440.5	438.4
107.5°	367.5	422.3	457.6	474.5	480.2	481.3	480.5	479.4
110°	341.3	397.9	440.8	467.1	480.9	487.5	490.8	492.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	320.0	373.8	417.1	447.4	467.1	477.5	483.7	487.0
115°	292.9	339.5	381.2	413.9	436.9	451.4	460.3	465.1
117.5°	273.7	314.2	350.3	380.5	403.6	418.7	427.7	431.2
120°	263.0	299.7	333.6	360.3	382.1	396.6	405.4	408.7
122.5°	254.0	288.1	318.5	343.6	363.1	376.6	385.2	388.3
125°	241.2	272.7	299.9	322.0	338.7	351.0	358.1	361.8
127.5°	228.0	257.4	282.8	303.6	318.9	330.0	336.9	339.2
130°	220.1	247.3	271.7	291.7	306.6	316.7	323.2	325.8
132.5°	211.9	237.6	259.9	279.1	293.9	303.9	309.8	312.4
135°	200.3	222.0	242.3	259.9	273.1	283.3	289.2	291.8
137.5°	190.8	208.5	225.6	240.6	252.3	261.5	266.9	269.4
140°	185.1	200.3	215.2	228.3	239.4	247.4	252.3	254.4
142.5°	180.3	193.2	206.0	217.4	226.9	233.8	238.5	240.4
145°	174.6	184.2	193.8	202.2	209.6	215.1	218.9	220.7
147.5°	169.8	177.1	184.0	190.0	195.7	199.9	202.0	202.8
150°	167.2	173.3	178.6	183.8	188.1	191.7	193.0	193.5
152.5°	164.9	170.4	175.2	179.2	182.8	185.4	186.6	187.0
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

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